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| PPLICATION NO. FILING DATE FIRST NAMED                           |                         | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. 2076 |
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| 09/747,530   | 12/22/2000 Chinmay S. I |                      | 42390P10213             |                       |
| 8791   | 7590 01/29/2004         |                      | EXAMINER                |                       |
|  | SOKOLOFF TAYLO          | TRUJILLO, JAMES K    |                         |                       |
| 12400 WILSHIRE BOULEVARD, SEVENTH FLOOR<br>LOS ANGELES, CA 90025 |                         |                      | ART UNIT                | PAPER NUMBER          |
|  | ·                       |                      | 2116 .                  | 4                     |
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Please find below and/or attached an Office communication concerning this application or proceeding.

| ,  |   |   | Application No.   | Applicant(s)   |  |  |  |
|--|---|---|---|--|--|--|--|
|  |   |   | 09/747,530  | PATEL, CHINMAY S.  |  |  |  |
| Office Action Summary  |   |   | Examiner  | Art Unit   |  |  |  |
|  |   |   | James K. Trujillo   | 2116   |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |   |   |   |  |  |  |  |
| THE  <br>- Exte<br>after<br>- If the<br>- If NO<br>- Failu<br>- Any i  | ORTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN asions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this com period for reply specified above is less than thirty (3 period for reply is specified above, the maximum s re to reply within the set or extended period for reply reply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).   | IICATION.<br>s of 37 CFR 1.130<br>munication.<br>30) days, a reply<br>tatutory period wi<br>y will, by statute, o | G(a). In no event, however, may a rep<br>within the statutory minimum of thirty (<br>Il apply and will expire SIX (6) MONTH<br>cause the application to become ABAN | y be timely filed  30) days will be considered timely.  S from the mailing date of this communication.  IDONED (35 U.S.C.§ 133). |  |  |  |
| 1)[🛛   | Responsive to communication(s) file   | ed on <u>23 <i>Ap</i></u>   | <u>ril 2001</u> .   |  |  |  |  |
| 2a)□   | This action is <b>FINAL</b> .   | 2b)⊠ This a   | oction is non-final.  |  |  |  |  |
| 3)□  | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |   |   |  |  |  |  |
| Disposit   | on of Claims  |   |   |  |  |  |  |
| 5)□<br>6)⊠<br>7)□  | Claim(s) 1-30 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  Claim(s) is/are allowed.  Claim(s) 1-30 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or election requirement.  |   |   |  |  |  |  |
| Application Papers   |   |   |   |  |  |  |  |
| 10)⊠   | The specification is objected to by the transfer of the drawing (s) filed on 23 April 200 Applicant may not request that any objected the oath or declaration is objected the specific or declaration is objected to be specific or declaration in the specific or declaration is objected to by the specific or declaration is objected to be specific or declaration in the specific or declaration is objected to be specific or declaration in the specific or declaration is objected to be specific or declaration in the specific or declaration is objected to be specific or declaration in the specific or declaration is objected to be specific or declaration in the specific or declaration is objected to be specific or declaration in the specific or declaration in the specific or declaration is objected to be specific or declaration in the specific or declaration is objected to be specific or declaration in the specific or | <u>1</u> is/are: a)[<br>ection to the d<br>g the согтесtio  | ☐ accepted or b) ☐ objecter rawing(s) be held in abeyance on is required if the drawing(s)  | e. See 37 CFR 1.85(a).<br>is objected to. See 37 CFR 1.121(d).   |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120  |   |   |   |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> <li>13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.</li> <li>37 CFR 1.78.</li> <li>a) The translation of the foreign language provisional application has been received.</li> <li>14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</li> </ul> |   |   |   |  |  |  |  |
| Attachmen  | • •   |   | <u></u>   |  |  |  |  |
| 2) Notic   | e of References Cited (PTO-892)<br>e of Draftsperson's Patent Drawing Review (F<br>nation Disclosure Statement(s) (PTO-1449) F  |   | 5) Notice of Info   | nmary (PTO-413) Paper No(s)<br>rmal Patent Application (PTO-152)   |  |  |  |

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### **DETAILED ACTION**

1. The office acknowledges the receipt of the following and placed of record in the file:

Declaration and Drawings dated 4/23/01.

2. Claims 1-30 are presented for examination.

## **Drawings**

- 3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the
  - a. operating system as per claim 1;
  - b. utility program as per claim 4; and
- c. response to a procedure to enumerate the peripheral device on the bus as per claim 6; must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

# Claim Objections

- 4. Claims 1 and 3 are objected to because of the following informalities:
  - a. As to claim 1, on lines 8-9 of the claim "host processing" should be changed to "host processing system" for clarity.
  - b. As to claim 3, on line 2 of the claim "a storage medium" to "the storage medium" to prevent the claim from being indefinite.

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Appropriate correction is required.

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. Claims 1, 7, 13, 19 and 25 is rejected under 35 U.S.C. 102(b) as being anticipated by Khenson et al., U.S. Patent 5,694,600 (hereinafter "Khenson").
- 7. As to claim 1 Khenson taught an apparatus comprising:
  - a. a host processing system (processing system 220 figure 1); and
  - b. a peripheral device comprising storage medium (storage device subsystem 250) comprising machine-readable instructions (operating system) stored thereon [figure 1 and col. 8 lines 39-51, wherein the storage device subsystem is interpreted to be a peripheral device] for:
    - i. providing one or more programs (IO.SYS and MSDOS.SYS) capable of being hosted on the host processing system [figure 2 and corresponding text]; and
    - ii. initiating an agent (IO.SYS) to reside on the host processing system, the agent comprising logic to launch the one or more programs on the host processing

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system in response to a predetermined event (start sequence or boot) at the host system [figure 2 and corresponding text].

- 8. As to claims 7, 13, 19 and 25 Khenson taught the claimed apparatus therefore he also taught the claimed method for operating the apparatus, the claimed article, the claimed peripheral, and the apparatus having the claimed means.
- 9. Claims 1, 7, 13, 19 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Pleso, U.S. Patent 6,009,480.
- 10. As to claim 1, Pleso taught an apparatus comprising:
  - a. a host processing system (host computer 54) [figure 2];
  - b. a peripheral device (printer 52) comprising a storage medium comprising machine readable instructions stored thereon for:
    - i. providing one or programs (device driver) capable of being hosted on the host processing system [col. 8 lines 36-55];
    - ii. initiating an agent (driver) to reside on the host processing system, the agent comprising logic to launch one or more programs (program for initializing the device and at least one to execute a print) on the host processing system in response to a predetermined event (booting and initialization of the system) at the host processing system [col. 7 line 66 through col. 8 line 4].

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11. As to claims 7, 13, 19 and 25 Pleso taught the claimed apparatus therefore he also taught the claimed method for operating the apparatus, the claimed article, the claimed peripheral, and the apparatus having the claimed means.

## Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 13. Claims 2, 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khenson in view of Chou et al., U.S. 5,832,283 (hereinafter "Chou").
- 14. As to claim 2, Khenson taught the apparatus according to claim 1 described above. Khenson further taught wherein the one or more programs comprise an operating system (MSDOS.SYS will start an operating system) [figure 2 and corresponding text].

Khenson does not expressly disclose wherein the agent comprises logic to initiate a system reset procedure of the host processing system in response to the predetermined event.

Chou teaches a system that comprises logic to initiate a system reset procedure of a host processing system in response to a predetermined event (boot) [col. 10 lines 21-35].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the agent of Khenson to initiate a system reset as taught by Chou because both systems are directed to booting host systems. One of ordinary skill would have made the modification

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because Chou teaches that such a reset places the system in components into a desired known operating state for proper operation.

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- 15. As to claim 3, Khenson together with Chou taught the apparatus according to claim 2 described above. Khenson's agent must have logic to map an address of an interrupt vector to a location in the storage medium storing machine-readable instructions for initiating a transmission of machine-readable instruction of one or more programs from the peripheral device to the host processing system. This is because the agent (IO.SYS) of Khenson will manage the rest of boot process (as is well know in the art) by initiating different programs from the peripheral to the host. In managing the boot process the agent must know where the programs and data reside constituting logic to map addresses where interrupts reside. As combined with Chou, logic must exist to initiate a system reset wherein some instructions are transmitted to a memory of the host processing system. In executing the boot process it is well known in the art that instructions would be transferred from the peripheral to the memory (RAM) of the host processing system and described by Khenson at col. 8 lines 41-45.
- As to claim 5, Khenson together with Chou taught the apparatus according to claim 1. 16. Khenson and Chou do not expressly disclose wherein the predetermined event comprises an event at a user interface of the host processing system. However, both Khenson and Chou are directed toward data processing system. Both also disclose user interfaces for a user to interact with each system [Chou - figure 2 and Khenson - figure 1]. It would have been obvious to one of ordinary skill in the art at the time of the to modify Khenson and Chou by having a predetermined event comprise an event at a user interface of the host processing system. An artisan would have readily recognized the need for a user to interact with the system to provide

the user control of a boot such as a turn on of the system or a reboot. Doing so would have enabled the user desirable control of a boot process.

- 17. Claims 4, 10, 17, 23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khenson and Chou in view of Thompson, U.S. Patent 5,557,732.
- 18. As to claim 4, Khenson together with Chou taught the apparatus according to claim 2 described above. Khenson and Chou do not expressly disclose wherein the one or programs comprises a utility program and agent further comprises logic to launch the utility program following a launch of the operating system in response to detection of the predetermined event.

Thompson taught wherein utility programs are launched following a launch of the operating system [col. 6 lines 35-52]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Khenson and Chou by having the agent launch the utility programs as taught by Thompson following the launch of the operating system in response to the predetermined event because Khenson, Chou and Thompson are directed to booting of a computer. One of ordinary skill in the art would have been motivated to make the modification because Thompson teaches that such utility programs are used in computer systems to desirably enable a user to access the operating system. Such access would be desirable in Khenson and Chou.

19. As to claims 10, 17, 23 and 28, Khenson together with Chou and Thompson taught the claimed apparatus therefore they also teach the claimed method for operating the apparatus, the claimed article, the claimed peripheral, and the apparatus having the claimed means.

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20. Claims 6, 12, 14, 20 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pleso in view of Sakarda et al. U.S. Patent 6,594,721.

As to claim 6, Pleso taught the apparatus according to claim 1 described above. Pleso further teaches wherein the apparatus comprises a data bus coupled between the host processing system and peripheral device [communication cable 56 figure 2]. Pleso further teaches wherein the peripheral further comprises logic for transmitting (downloading) machine-readable instructions (driver) to the host processing system.

Pleso does not expressly disclose wherein creating the agent is in response to a procedure to enumerate the peripheral device on the bus.

Sakarda teaches creating the agent in response to a procedure to enumerate the peripheral device on the bus [col. 3 lines 58-61]. Specifically, Sakarda teaches that in response to an enumeration the agent (drivers) for a device will be downloaded and executed to allow the devices to operate.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Pleso by creating the agents in response to an enumerate procedure as taught by Sakarda because both inventions are directed toward using peripheral devices. One of ordinary skill would have been motivated to make the modification because Sakarda teaches that this is a normal procedure for plug and play peripheral devices such as those of Pleso. Furthermore, the teachings of Sakarda would permit peripheral to be connected independent of an operating system, which would be desirable in Pleso.

As to claims 10, 17, 23 and 28, Pleso taught the claimed apparatus therefore they also teach the claimed method for operating the apparatus, the claimed article, the claimed peripheral, and the apparatus having the claimed means.

### Conclusion

- 23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - U.S. Pat. No. 6,477,482 to Maupin et al. This patent teaches that enumeration is necessary before performed to make an external device accessible to a PC.
  - U.S. Pat. No. 6,073,188 to Fleming. This patent teaches a system that is booting using a hard disk.

Japan Pat. No. JP 11195000 A to Wakamori. This patent teaches using a Java agent sent from a server to boot a client.

White, Ron; "PC Computing How Computers Work", 1994, Ziff-Davis Press, page(s): 14-17. This book teaches how a computer boots from a disk (peripheral).

Ralston, A., Riely, E. D., "Encyclopedia of Conmputer Science", 1993, Van Nostrand Reinhold, page(s): 140, 855 and 1052. This book defines a peripheral device as an auxiliary memory such as a hard disk. This book also defines a boo and reboot.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James K. Trujillo whose telephone number is (703) 308-6291. The examiner can normally be reached on M-F (7:30 am - 5:00 pm) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on (703) 305-9717. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

James Trujillo December 29, 2003

> THOMAS LEE SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100